Abstract of the Disclosure:

An adder circuit (41) adds four main electric signals to produce an HF signal (a picked-up signal). A peak hold circuit (43) holds a peak of the HF signal to a peak held signal. The peak held signal is a signal indicative of a level of I-TOP of the HF signal. A gain control amplifier (44) amplifies the HF signal by a gain equal to a reciprocal of the peak held signal to produce an amplified signal.